Mr. Leroy T. Harrell
Essex Group, Inc.
190 East Polk Street
Orleans, Indiana 47452

Re: 117-11872-00013
Fourth Administrative Amendment to
Part 70 117-6923-00013

Dear Mr. Harrell:

Essex Groups, Inc. was issued a permit on February 9, 1999 for a PVC primary wire, thermoset primary wire, ignition wire, battery cable and machine tool wire manufacturing facility. A letter requesting the addition of an insignificant emission unit was received on February 8, 2000. Pursuant to the provisions of 2-7-11 the permit is hereby administratively amended as follows:

The facility description Section A.3 is revised as follows:

(c) One (1) PVC extrusion department consisting of ~~8~~ **9** individual process lines, identified as emission units PVC 1 through PVC ~~8~~ **9**. Each line has a maximum material usage of 142.7 pounds per hour. Emissions are controlled by an air filtering system which contains both particulate and activated carbon filters with an overall control efficiency of 66%.

The facility description in Section D.3 is revised as follows:

One (1) PVC extrusion department consisting of ~~8~~ **9** individual process lines, identified as emission units PVC 1 through PVC ~~8~~ **9**. Each line has a maximum material usage of 142.7 pounds per hour. Emissions are controlled by an air filtering system which contains both particulate and activated carbon filters with an overall control efficiency of 66%. Emissions are vented inside the building.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Rachel Meredith, at (800) 451-6027, press 0 and ask for Rachel Meredith or extension 3-5691, or dial (317) 233-5691.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

RLM
cc: File - Orange County
U.S. EPA, Region V
Orange County Health Department
Southwest Regional Office
Air Compliance Section Inspector - Gene Kelso
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

PART 70 OPERATING PERMIT
OFFICE OF AIR MANAGEMENT

Essex Group, Inc.
190 East Polk Street
Orleans, Indiana 47452

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T117-6923-00013	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: February 9, 1999

First Administrative Amendment 117-11109	Issuance Date: July 22, 1999
Second Administrative Amendment 117-11349	Issuance Date: October 28, 1999
Third Administrative Amendment 117-11532	Issuance Date: December 6, 1999

Fourth Administrative Amendment 117-11872	Pages Affected 1, 1a, 6 and 29
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

CV7, and CV8 have a maximum material usage of 159.82 pounds per hour each. Line CV2 has a maximum material usage of 273.97 pounds per hour.

(c) One (1) PVC extrusion department consisting of 9 individual process lines, identified as emission units PVC 1 through PVC 9. Each line has a maximum material usage of 142.7 pounds per hour. Emissions are controlled by an air filtering system which contains both particulate and activated carbon filters with an overall control efficiency of 66%. Emissions are vented inside the building.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]
One (1) PVC extrusion department consisting of 9 individual process lines, identified as emission units PVC 1 through PVC 9. Each line has a maximum material usage of 142.7 pounds per hour. Emissions are controlled by an air filtering system which contains both particulate and activated carbon filters with an overall control efficiency of 66%. Emissions are vented inside the building.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Volatile Organic Compound (VOC)

Any change or modification which may increase potential emissions from the PVC extrusion department shall require prior approval from the OAM to determine applicability requirements of 326 IAC 8, before such change may occur.

D.3.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the PM from the PVC extrusion department shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility.

Compliance Determination Requirements

D.3.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.3.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for an Administrative Amendment to a Part 70 Operating Permit

Source Background and Description

Source Name:	**Essex Group**
Source Location:	**190 East Polk Street, P.O. Box 127, Orleans, Indiana 47452**
County:	**Orange**
SIC Code:	**3357**
Operation Permit No.:	**T117-6923-00013**
Amendment No.:	**117-11872-00013**
Amendment Reviewer:	**Rachel Meredith**

The Office of Air Management (OAM) has reviewed a request for an amendment to Part 70 Permit No. T117-6923-00013, received from Essex Group, Inc. relating to the following emission units.

(a) the addition of one (1) new PVC extrusion line, designated as PVC 9, with a maximum throughput of 1,250,000 pounds per year, to the existing PVC Extrusion Department which currently consists of eight (8) PVC extrusion lines, for a total of nine (9) PVC extrusion lines in the PVC Extrusion Department.

History

This source was issued a Part 70 Operating Permit on February 9, 1999. On February 8, 2000, the Essex Group, Inc. submitted a request for the addition of an insignificant emission unit to the PVC Extrusion Department.

Existing Approvals

Since issuance of the Part 70 Operating Permit, the following approvals have been issued:

1. First Administrative Amendment, 117-11109, issued July 22, 1999.

2. Second Administrative Amendment, 117-11349, issued October 28, 1999.

3. Third Administrative Amendment, 117-11532, issued December 6, 1999.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Administrative Amendment to the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on September 17, 1999.

Emission Calculations

See Appendix A of this document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential To Emit (tons/year)
PM-10	0
SO_2	0
VOC	0.0209
CO	0
NO_x	0

HAP's	Potential Emissions (tons/year)
Toluene	less than 1
MIBK	less than 1
Xylene	less than 1
TCE	less than 1
TOTAL	less than 2.5

Justification for Modification

The Part 70 Permit is being modified through an Administrative Amendment pursuant to 326 IAC 2-7-11(a)(8). This amendment changes the facility description for the PVC Department and does not increase the potential to emit of any regulated pollutant greater than the thresholds under 326 IAC 2-1.1-3(d)(1).

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Potential To Emit (tons/year)
PM-10	Less than 100

SO_2	Less than 100
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Toluene	less than 10
MIBK	less than 10
Xylene	greater than 10
TCE	less than 10
TOTAL	greater than 25

1. This existing source is a major stationary source because one or more HAP is emitted at a rate of 10 tons per year or more and the source emits a combination of HAPs greater that 25 tons per year.

2. These emissions are based upon the Annual Air Emission Inventory and Emission Statement for 1998.

County Attainment Status

The source is located in Orange County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Orange County has been designated as attainment or unclassifiable for ozone.

Federal Rule Applicability

There is no change in Federal Rule Applicability with the issuance of this Administrative Amendment.

State Rule Applicability

There is no new State Rule Applicability with the issuance of this Administrative Amendment.

Compliance Requirements

There is no change in Compliance Requirements with the issuance of this Administrative Amendment.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

This source will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the 1990 Clean Air Act Amendments.

Conclusion

The operation of the new PVC extrusion line shall be subject to the conditions of the attached proposed **Fourth Administrative Amendment No. 117-11872-00013.**

PART 70 OPERATING PERMIT
OFFICE OF AIR MANAGEMENT

Essex Group, Inc.
190 East Polk Street
Orleans, Indiana 47452

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Conclusion

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Revised Calculations (Based on Amendment)

PVC Extrusion Department - New Line (PVC 9)

VOC Potential Emissions:

Maximum throughput = 1,250,000 lb/yr = 142.7 lb/hr per line

142.7 lb/hr * ton/2000 lb * 33.4 Fg/g * g/1x10^6 * 8760 hr/yr = 0.021 ton/yr per line

PVC Extrusion Department - Department Before Amendment (8 lines)

VOC Potential Emissions:

Maximum throughput = 1,250,000 lb/yr = 142.7 lb/hr per line

142.7 lb/hr * ton/2000 lb * 33.4 Fg/g * g/1x10^6 * 8760 hr/yr = 0.021 ton/yr per line

Total VOC for PVC Extrusion Department (0.021 x 8) = .168 tons/yr

PVC Extrusion Department - Total Department with Amendment (9 lines)

VOC Potential Emissions:

Maximum throughput = 1,250,000 lb/yr = 142.7 lb/hr per line

142.7 lb/hr * ton/2000 lb * 33.4 Fg/g * g/1x10^6 * 8760 hr/yr = 0.021 ton/yr per line

Total VOC for PVC Extrusion Department (0.021 x 9) = .189 tons/yr

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